



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,033	05/19/2000	Pekka Mottonen	872.8708.USU	1031
29683	7590	01/04/2005	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			MEHRA, INDER P	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/575,033

Applicant(s)

MOTTONEN ET AL.

Examiner

Inder P Mehra

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, and 7 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This is in response to response to dated: 9/20/00. Based on this response, claims 10-14 have been added. Claims 1-9 are amended. Claims 1-14 are pending.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2, 4-6, 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the introduction of a 200kHz GSM-type network " in line

1. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claims 1 and 5 recites the limitation "rotating control channels belonging to a serving time group over every other time slot number" in line 8. Its recitation of other time slot number is not clearly explained as to its location in "52-multiframe sequence" or block sequence.

Applicant's response is in regard to "lack of antecedent basis", whereas the question raised by examiner is whether "every other time slot" is interpreted as "any alternate time slot" or "particular number in sequence".

Appropriate clarification/correction is required.

5. Claims 2, 9-10, and 12-13, recite limitation "odd timeslot numbers as 7, 5, 3, 1, 7, 5,..., etc.". A broad range or limitation together with a narrow range or limitation that falls within the

Art Unit: 2666

broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 2, 9-10, and 12-13 recites the broad recitation, "etc.", and the claim also recites 7,5,3, 1, 7, 5,--- which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent..

7. Claims 1-2, 4-6, 9-10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by over ("3-Carrier Compact Proposal, revision 1.0, ETSI SMG2 Working Session on EDGE, May 17-19, 1999, Paris, France, Source: UWCC, PP, 1-16, hereinafter, "3-Carrier Compact Proposal"

Art Unit: 2666

For claims 1, 5, 10, and 13, 3-Carrier Compact Proposal discloses the a method for enabling introduction of a 200khz GSM-type network----- GSM-type network, refer to abstract, introduction and paragraph 2 at page 2;

- providing a 52-multiframe (refer to paragraph 4 at page 3) containing 12 blocks of four consecutive frames (refer to 4/12 reuse (rotating) 4 time groups in sub-paragraph 2 at page 4), two idle frames, and two channels used for control channel purposes (control signaling, refer to sub-paragraph 3 at page 4);
- rotating control channels belonging to a serving time group over every other time slot number (If using an effective 3/9 reuse for control signaling , 3 time groups are used with control on TN1, TN3, and TN5.) , refer to sub-paragraph 2 at page 4 and sub-paragraph 6 at page 5.

For claims 2, 6, 9-11 and 13, “3-Carrier Compact Proposal” discloses he rotation occurs over odd every time slot numbers as 7, 5, 3, 1, 7, 5-----etc. and where the rotation occurs between frame numbers (FN) mod 52=3 and 4, refer to paragraph 4and “If using an effective 3/9 reuse for control signaling , 3 time groups are used with control on TN1, TN3, and TN5..” in second paragraph at page 4.

For claims 4 and 8 , 3-Carrier Compact Proposal discloses, information specifying at least the rotation direction is signaled to the mobile station in a downlink synchronization channel, refer to ( a mobile will, ----synchronization burst) paragraph 8 at page 5.

***Allowable subject Matter***

8. Claims 3, and 7 are allowed.

Art Unit: 2666

9. The following is an examiner's statement of reasons for allowance:

As recited by claims 3 and 7,

wherein a mapping of the control channels on timeslot numbers is defined by the

following formula: For  $OXFN \bmod 52S3$ ,  $rN = ((6x((FN \bmod 52) \bmod 4)) + 1 + (2xTG)) \bmod$

8; and For  $45 > \bmod 52S51$ ,  $TN = ((6x((FN \bmod 52) \bmod 4)) + 7 + (2xTG)) \bmod 8$ , where TG is a time group value.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Claim 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

12. Applicant's arguments filed 9/20/04 have been fully considered but they are not persuasive.

Applicant argues, "Rotation of time slots per se is not mentioned in sub-paragraph 6. In

Art Unit: 2666

fact, a mention of a rotation of timeslots or timeslot number is not found in the document 3-carrier Compact Proposal.

In response, it is stated that "3-Carrier Compact Proposal" discloses, " If using an effective 3/9 reuse for control signaling , 3 time groups are used with control on TN1, TN3, and TN5.) , refer to sub-paragraph 2 at page 4 and sub-paragraph 6 at page 5".

In light of above explanation, arguments by applicant are not persuasive.

13. Applicant's amendment (claims 10-14 are added) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 2666

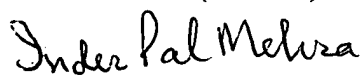
*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**FRANK DUONG**  
**PRIMARY EXAMINER**

 12/22/04  
Inder P Mehra  
Examiner  
Art Unit 2666